Tetralogy of Fallot (TOF)

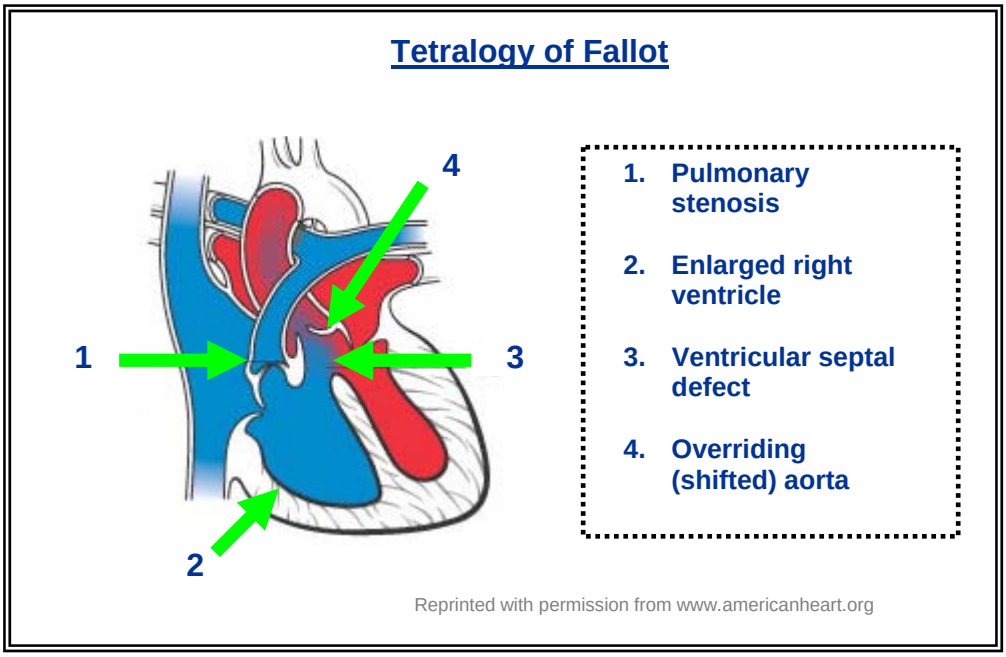
What is Tetralogy of Fallot?

Tetralogy of Fallot (TOF) is a complex heart defect that has the four following components:

1) **Pulmonary stenosis** (PS; narrowing of the valve between the right ventricle and the lungs)
2) **Right ventricular hypertrophy** (enlargement of the right lower chamber of the heart)
3) A large **ventricular septal defect** (VSD; a hole between the wall dividing the two lower chambers of the heart)
4) An **overriding aorta** (enlarged aorta positioned over a VSD)

The combination of these four defects results in oxygen-poor blood being delivered to the body. Because oxygen-poor blood is being delivered to the body, these babies may have **cyanosis** (blue skin color, due to lack of oxygen).

Approximately 5 – 7% of babies with congenital (present at birth) heart defects have TOF.



What causes TOF?

Currently, the exact cause of TOF is not known. Heredity likely plays a role in the development of all heart defects, meaning that if someone had a congenital heart defect, he or she has an increased chance of having a child with a heart defect.

How is TOF treated?

Open heart surgery is required to correct TOF. Your child's doctor(s) will discuss appropriate treatment options with you.

For more information

American Heart Association - http://www.americanheart.org/presenter.jhtml?identifier=11105
Cincinnati Children's Hospital Medical Center's Heart Center Encyclopedia – http://www.cincinnatichildrens.org/health/heart-encyclopedia/default.htm
MedlinePlus - http://www.nlm.nih.gov/medlineplus/congenitalheartdefects.html
National Heart Lung and Blood Institute - http://www.nhlbi.nih.gov/health/dci/Diseases/chd/chd_what.html

Sources: Cincinnati Children's Hospital, American Heart Association